

REMARKS

Examiner G. Peralta is thanked for the continued Search and Examination of the Subject Application for Patent.

Reconsideration of the Rejection of Claims 1-28 under 35 U.S.C. § 103(a) as being unpatentable over Current (U.S. Pat. No. 5,155,369) in view of Aitken (U.S. Pat. No. 4,578,589) is requested.

Current describes a two step ion implantation method. In one embodiment described by Current the first step implants a light dose of ions at an angle of 5-7 degrees away from the normal to the surface of the substrate. The second step implants a much larger dose directed along the normal to the surface of the substrate, see column 3, lines 35-60. In a variant of this embodiment the implantation energy is much smaller in the first implantation step than in the second implantation step, see column 4, lines 7-9.

In another embodiment described by Current the first implantation step is broken into a pair of substeps. In the first substep the ions are incident at an angle A with respect to the normal to the surface of the substrate.

In the second substep the ions are incident at an angle -A with respect to the normal to the surface of the substrate, see column 4, lines 54-60.

In the methods described in Claims 1-28 source/drain regions or polysilicon electrodes are doped using a single ion implantation step using either P_2^+ ions, Claims 1-7 and 15-21, or As_2^+ ions, Claims 8-14 and 22-28. The ion implantation doping method described in Claims 1-28 uses a single ion implantation step. This single ion implantation step described in the methods of Claims 1-28 is significantly different from and not obvious from the two step ion implantation method described by Current.

not in the claim

Aitken describes apparatus and methods for ion implantation. Aitken describes using a beam analyzing arrangement to selectively separate ion species in the beam on the basis of mass to produce an analyzed beam. However, Aitken does not make the use of a single ion implantation step using either P_2^+ ions or As_2^+ ions to dope source/drain regions or polysilicon electrodes, as is described in Claims 1-28, an obvious extension of Current.

It is believed that the single step ion implantation doping methods described in Claims 1-28 are different from, not obvious from, and patentably distinct

from the two step ion implantation method described by Current in view of the ion implantation apparatus and methods described by Aitken. Reconsideration of the Rejection of Claims 1-28 under 35 U.S.C. § 103(a) as being unpatentable over Current in view of Aitken, and Allowance of Claims 1-28, are requested.

It is requested that should Examiner Peralta not find that the Claims are now Allowable that the Examiner call the undersigned Agent at (845)-462-5363 to overcome any problems preventing allowance.

Respectfully submitted,



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